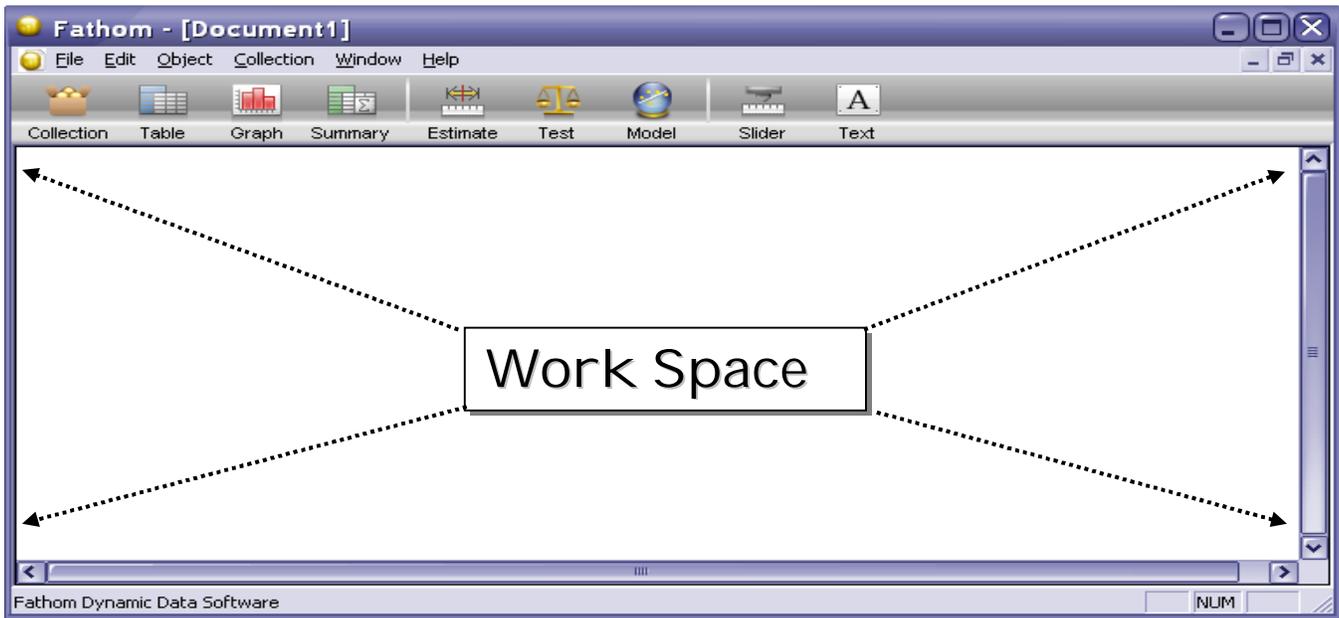
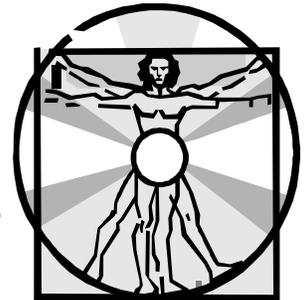


- Start Fathom.



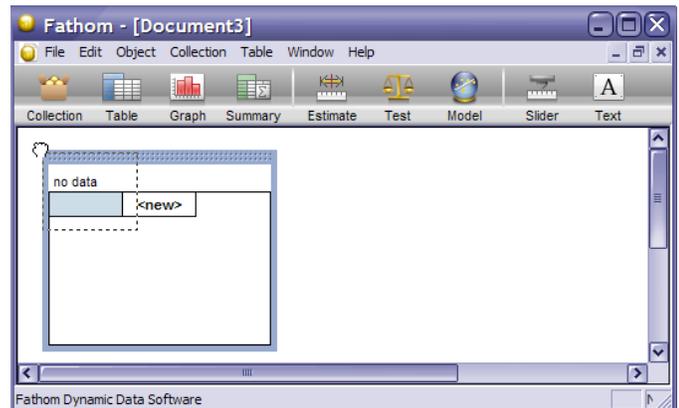
Leonardo DaVinci study the human form through examining exhumed corpses. He found many proportions in the human form. He suggested some of the following proportions (any would make an interesting study to investigate in Fathom).

- The length of an individual's outspread arms is equal to their height (1:1)
- The length of an individual's hand is equal to one tenth their height (10:1)
- The distance from the bottom of the chin to the nose is one third the length of the head (3:1)
- The distance from shoulder to fingertip and distance from elbow to fingertips is the ratio phi (Φ) (1:1.618)
- The a person's height and the distance from floor to navel is the ratio phi (Φ) (1:1.618)
- The distance from hip to heel and knee to heel is the ratio phi (Φ) (1:1.618)



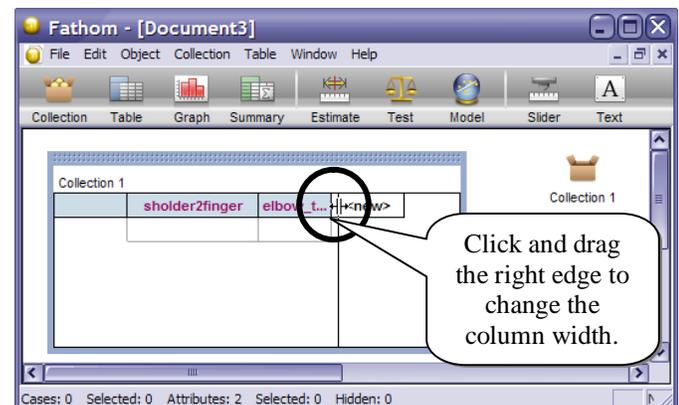
- First drag a **Table**, , down from the shelf into the workspace.
- Click on the word <new> in the Table and change the name to one of the attributes above such as the "sholder2finger". Then click on the next <new> and change the column title to an appropriate corresponding attribute from above. For this example "elbow2finger"

Extension: Try using more than just two columns try experimenting with several different attributes suggested above.

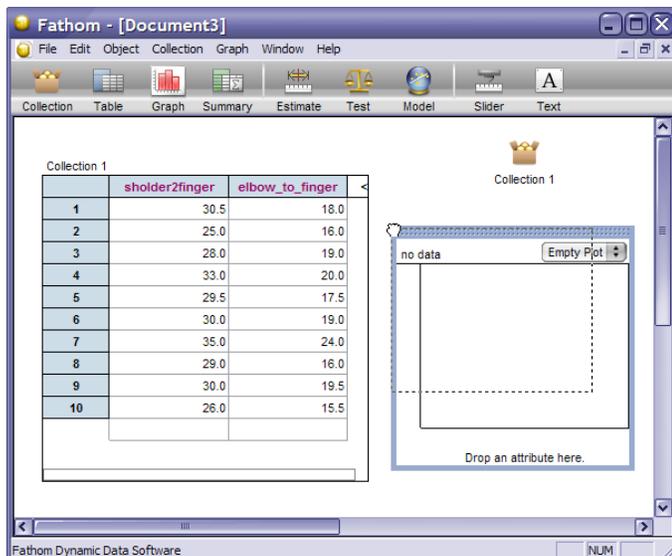


- You may also wish to increase the size of the column. This can be done by placing the cursor on the right edge of the column title cell. When the cursor changes to  and then click and drag to the right.

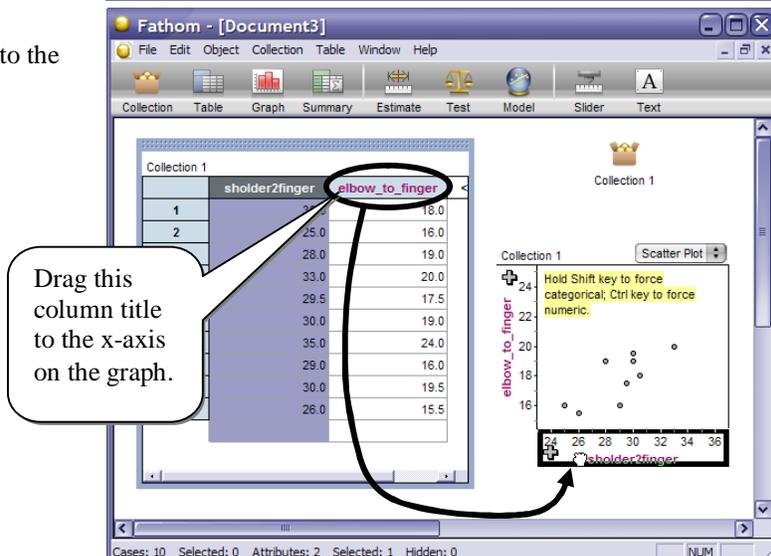
- Using a tape measure begin typing in corresponding values in each column. For members in the class.



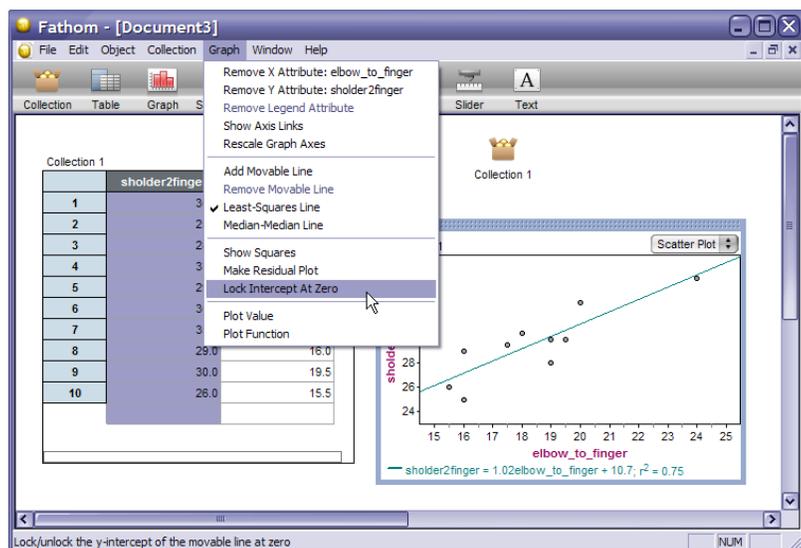
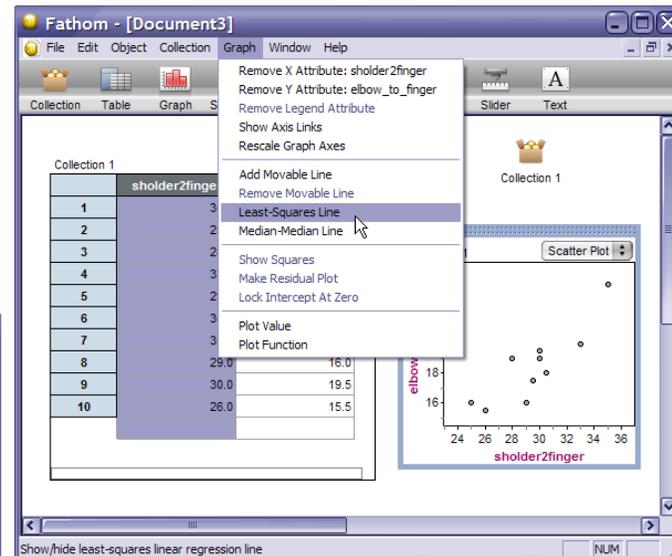
- Drag a Graph, , into the workspace.



- Next, drag the column title (in this example “shoulder2finger”) to the y-axis on the graph. Then, drag the second column title (in this example “elbow2finger”) to the x-axis on the graph.



- With the graph highlighted, select “Least Squares Line” from the Graph menu (the graph menu will only appear at the top when the graph in the workspace is selected).
- Again with the graph still selected, select “Lock Intercept at Zero” from the Graph menu.



What is the slope of the line (does it match DaVinci’s suggested proportion)?

Which attributes have the strongest relationship?